

REMARKS

This Response is submitted in reply to the final Office Action dated January 6, 2009, issued in connection with the above-identified application. Claims 1-4 and 7-28 are all the claims pending in the present application. With this Response, no claims have been amended, and no new matter has been introduced. Favorable reconsideration is respectfully requested.

In the Office Action, claims 1-4, 7, 10-14 and 17-28 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al. (U.S. Patent No. 6,801,767, hereafter "Schwartz") in view of Ichibangase et al. (U.S. Publication No. 2002/0114042, hereafter "Ichibangase"). The Applicants assert that Schwartz in view of Ichibangase fails to disclose or suggest the features of at least independent claims 1 and 28. Specifically, claim 1, in relevant part, recites the following:

"[a] wireless access system using Carrier Sense Multiple Access for Media Access Control of a host device using a plurality of terminals, the wireless access system comprising:

... an access control section for transmitting the downstream optical signal received from the master station to the plurality of slave stations via the optical fiber transmission line, and transmitting the upstream optical signal transmitted from the any one of the plurality of slave stations to the master station and to all other slave stations of the plurality of slave stations via the optical fiber transmission line." (Emphasis added).

The features emphasized above in independent claim 1 are similarly recited in independent claim 28. Specifically, claim 28 is a corresponding method having steps performed by the access control section of claim 1. Additionally, the above features are fully supported by the Applicants' disclosure (see, e.g., Fig 1 and pgs. 24-28).

In the Office Action, the Examiner relied on Schwartz in view of Ichibangase for disclosing or suggesting all the features recited in claims 1 and 28. However, the Examiner relies primarily on Ichibangase for disclosing or suggesting all the features of the claimed access control section and method of the present invention. The Applicants respectfully disagree with the Examiner interpretation of the present invention as well as the conclusions reached with regard to Ichibangase.

First, in the "Examiner answer" of the Office Action, the Examiner interprets the description of the claimed access control section as follows:

"[i]n paragraph 35 of the specification of the current application the applicant stated,"...an optical multiplexing/demultiplexing section 14 ...serves as an access control section...." The Examiner also concludes that the access control section (14 of Fig. 1) is a multiplex/demultiplex unit. The access control section demultiplexes the downstream multiplexed signals inputted from the masterstation (13 of Fig. 1) and distributes the demultiplexed signals to the slave stations (15a-15c of Fig. 1). Similarly, in the upstream direction, the access control section (154 of Fig. 1) receives the upstream signals from the slave station (15a-15c of Fig. 1) and multiplexes the received signal and outputs the multiplexed signals to the master station (13 of Fig. 1).

However, although the access control section of the present invention is a multiplex/demultiplex unit" 14 and "demultiplexes the downstream multiplexed signal inputted from the master station 13 and distributes the demultiplexed signals to the slave stations 15a - 15c," the access control section does not receive the upstream signals inputted from the slave stations 15a - 15c, multiplex the received signals and output the multiplexed signal to the master station 13," as suggested by the Examiner.

In fact, nowhere in the specification of the present application is it described that "the access control section (the optical multiplexing/demultiplexing section 14) multiplexes a plurality of optical signals received from a plurality of slave stations."

The Applicants respectfully point out that the problem solved by the present invention is to avoid collisions under random access (i.e., upstream optical signals transmitted) from a plurality of slave stations. Thus, it is impossible that the access control section of the present invention concurrently receives a plurality of upstream optical signals transmitted from a plurality of slave stations. Additionally, it is also impossible that the access control section multiplexes the received (if not concurrently received) plurality of optical signals and transmits the multiplexed signal to a master station.

The specification of the present application only describes multiplexing a downstream

signal with an upstream signal, but does not describe multiplexing a plurality of upstream signals with each other at all. Therefore, there appears to be a basic misunderstanding in the Examiner's interpretation of the claimed access control section of the present invention.

Second, in the Office Action, the Examiner relies on ¶57 and ¶12, Fig. 12, and Fig. 13 of Ichibangase for disclosing the claimed access control section of the present invention. However, Ichibangase (in above cited portions) merely discloses or suggests that an optical signal in the uplink direction, outputted from a slave station 120-1, is transmitted to the master station 110 via the optical splitter 134. In the downlink direction, optical signals including management information "G" are transmitted from the master station 110 to all of the slave stations 120-1, 120-2 and 120-3; and in the uplink direction, an optical signal using time slots based on the management information "G" is transmitted from each of the slave stations 120-1, 120-2 and 120-3 to the master station 110.

In other words, Ichibangase discloses that the optical signals for the downlink direction are transmitted from the master station 110 to all of the slave stations 120-1, 120-2 and 120-3 in a multicast manner, and the optical signal for the uplink direction is transmitted from each of the slave stations 120-1, 120-2 and 120-3 to the master station 110 in a unicast manner. The optical splitter 134 merely demultiplexes an optical signal from the master station 110 and multiplexes optical signals from the slave stations 120-1, 120-2 and 120-3.

The present invention clearly differs from Ichibangase in that, in Ichibangase, the uplink signal outputted from a slave station is merely transmitted to the master station. Additionally, in Ichibangase, to transmit information regarding the optical signal to the other slave stations, it would be necessary for the master station to newly generate an optical signal for the downlink direction (including this information) and transmit it to the other slave stations.

Thus, no combination of Schwartz and Ichibangase would result in, or otherwise render obvious, all the features of independent claims 1 and 28. Additionally, no combination of Schwartz and Ichibangase would result in, or otherwise render obvious, all the features of claims 2-4, 7, 10-14 and 17-27 at least by virtue of their dependency from independent claim 1.

In the Office Action, claims 8 and 9 have been rejected under 35 U.S.C. 103(a) as being

unpatentable over Schwartz in view of Ichibangase, and further in view of Kewitsch et al. (U.S. Patent No. 6,201,909); and claims 15 and 16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz in view of Ichibangase, and further in view of Ishida et al. (U.S. Patent No. 5,860,057).

Claims 8, 9, 15 and 16 depend from independent claim 1. As noted above, Schwartz and Ichibangase fail to disclose or suggest the features recited in independent claim 1. Additionally, Kewitsch and Ishida fail to overcome the deficiencies noted above in Schwartz and Ichibangase. Accordingly, no combination of Schwartz and Ichibangase with either Kewitsch or Ishida would result in, or otherwise render obvious, claims 8, 9, 15 and 16 at by virtue of their dependency from independent claim 1.

In light of the above, the Applicants respectfully submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass the present application to issue.

Respectfully submitted,

Tsutomu NIIHO et al.

/Mark D. Pratt/

By: 2009.04.06 17:57:26 -04'00'

Mark D. Pratt
Registration No. 45794
Attorney for Applicants

MDP/ats
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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